In the Claims:

1-26. (Canceled)

27. (Previously presented) A compound which binds to a DM2 protein, which compound comprises an amino acid motif comprising at least eight consecutive amino acids of the formula

R_1-X-F-X-R_2-R_3-W-X-X-R_4 (I) (SEQ ID NO: 4)

wherein

R_1 is a proline (P), leucine (L), glutamic acid (E), cysteine (C) or glutamine (Q),
X stands for any natural amino acid,
R_2 is arginine (R), histidine (H), glutamic acid (E), cysteine (C), serine (S), or aspartic acid (D),
R_3 is histidine (H), phenylalanine (F) or tyrosine (Y),
R_4 is phenylalanine (F), glutamine (Q) or leucine (L); and
F is phenylalanine and W is tryptophan,
and inhibits the binding of said DM2 protein to a p53 protein.

28. (Previously presented) The compound according to claim 27 wherein the compound binds to human DM2 (HDM2).

29. (Previously presented) The compound according to claim 27 further comprising a biotin moiety coupled to the amino acid motif.

30. (Previously presented) The compound according to claim 27 wherein the amino acid motif comprises a cyclic peptide.

31. (Previously presented) The compound according to claim 27, wherein the amino acid motif comprises a cyclic lactam.

32. (Previously presented) The compound according to claim 27 wherein the amino acid motif comprises a disulfide bond.

33. (Previously presented) The compound according to claim 27 which comprises no more than fifteen amino acids (15 mers).

34. (Previously presented) The compound according to claim 27 which comprises an amino acid motif selected from the group consisting of M-P-R-F-M-D-Y-W-E-G-L-N (SEQ ID NO: 6), Q-P-T-F-S-D-Y-W-K-L-L-P (SEQ ID NO: 7), and P-X-F-X-D-Y-W-X-X-L (SEQ ID NO: 8).

35. (Previously presented) The compound according to claim 27, which comprises eight amino acids according to the formula

F-X2-R2-R3-W-X3-X4-R4 (Ib) (SEQ ID NO: 10)

wherein R2 is arginine (R), histidine (H), glutamic acid (E), cysteine (C), serine (S), or aspartic acid (D);

R3 is histidine (H), phenylalanine (F), or tyrosine (Y);

R4 is phenylalanine (F), gutamine (Q) or leucine (L);

X2 is methionine (M), isoleucine (I), threonine (T), arginine (R), alanine (A) or serine (S);

X3 is glutamic acid (E), threonine (T), alanine (A), phenylalanine (F) or serine (S); and

X4 is glycine (G), glutamine (Q), threonine (T), alanine (A) or aspartic acid (D).

36. (Previously presented) The compound according to claim 27 comprising an amino acid motif of the formula

X1-F-X2-R2-R3-W-X3-X4-R4 (Ic) (SEQ ID NO: 11)

wherein

R2 is arginine (R), histidine (H), glutamic acid (E), cystine (C), serine (S), or aspartic acid (D);

R3 is histidine (H), phenylalanine (F) or tyrosine (Y);

R4 is phenylalanine (F), glutamine (Q) or leucine (L);

X1 is arginine (R), asparagine (N), alanine (A), threonine (T), or valine (V);

X2 is methionine (M), isoleucine (I), threonine (T), arginine (R), alanine (A), or serine (S);

X3 is glutamic acid (E), threonine (T), alanine (A), phenylalanine (F), or serine (S); and

X4 is glycine (G), glutamine (Q), threonine (T), alanine (A), or aspartic acid (D).

37. (Currently amended) The compound according to claim 27 comprising an amino acid motif selected from the group consisting of: P-A-F-T-H-Y-W-P (SEQ ID NO: 12), P-T-F-S-D-Y-W-P (SEQ ID NO: 13), and P-R-F-M-D-Y-W-P (SEQ ID NO: 14).

38. (Previously presented) The compound according to claim 27, wherein R2 is aspartic acid (D).

39. (Previously presented) The compound according to claim 35, wherein at least one of R2, X2, X3, and X4 is defined as follows: R2 is aspartic acid (D), X2 is methionine (M), X3 is glutamic acid (E), and X4 is glycine (G).

40. (Previously presented) The compound according to claim 36, wherein at least one of R2, X1, X2, X3, and X4 is defined as follows: R2 is aspartic acid (D), X1 is arginine (R), X2 is methionine (M), X3 is glutamic acid (E), and X4 is glycine (G).

41. (Previously presented) A method for inhibiting the binding of a DM2 protein to a p53 protein comprising contacting said DM2 protein with a compound which compound comprises an amino acid motif comprising at least eight consecutive amino acids of the formula

R_1-X-F-X-R_2-R_3-W-X-X-R_4 (I) (SEQ ID NO: 4)

wherein

R_1 is a proline (P), leucine (L), glutamic acid (E), cysteine (C) or glutamine (Q),

X stands for any natural amino acid,

R_2 is arginine (R), histidine (H), glutamic acid (E), cysteine (C), serine (S), or aspartic acid (D),

R_3 is histidine (H), phenylalanine (F) or tyrosine (Y),

R_4 is phenylalanine (F), glutamine (Q) or leucine (L); and

F is phenylalanine and W is tryptophan,

and inhibits the binding of said DM2 protein to a p53 protein.

42. (Previously presented) The method of claim 41 wherein R2 is aspartic acid (D).

43. (Previously presented) A purification method comprising:

(a) contacting a compound comprising an amino acid motif comprising at least eight consecutive amino acids of the formula

R_1-X-F-X-R_2-R_3-W-X-X-R_4 (I) (SEQ ID NO: 4)

wherein

R_1 is a proline (P), leucine (L), glutamic acid (E), cysteine (C) or glutamine (Q),
X stands for any natural amino acid,
R_2 is arginine (R), histidine (H), glutamic acid (E), cysteine (C), serine (S), or aspartic acid (D),
R_3 is histidine (H), phenylalanine (F) or tyrosine (Y),
R_4 is phenylalanine (F), glutamine (Q) or leucine (L); and
F is phenylalanine and W is tryptophan,

and inhibits the binding of said DM2 protein to a p53 protein, with a binding partner of said compound; and

(b) purifying said binding partner.

44. (Previously presented) The method of claim 43 wherein said binding partner is a DM2 protein.

45. (Previously presented) The method of claim 44 wherein said binding partner is HDM2.

46. (Previously presented) The method of claim 45 wherein R2 is aspartic acid (D).

47-51. (Canceled)

52. (Currently amended) A composition comprising a compound, which compound comprises an amino acid motif comprising at least eight consecutive amino acids of the formula

R_1-X-F-X-R_2-R_3-W-X-X-R_4 (I) (SEQ ID NO: 4)

wherein

R_1 is a proline (P), leucine (L), glutamic acid (E), cysteine (C) or glutamine (Q),
X stands for any natural amino acid,
R_2 is arginine (R), histidine (H), glutamic acid (E), cysteine (C), serine (S), or aspartic acid (D),
R_3 is histidine (H), phenylalanine (F) or tyrosine (Y),
R_4 is phenylalanine (F), glutamine (Q) or leucine (L); and
F is phenylalanine and W is tryptophan,

and inhibits the binding of said DM2 protein to a p53 protein, in ~~admixure~~ admixture with at least one pharmaceutically acceptable carrier.